

WHAT IS CLAIMED IS:

1. A system for generating a character thumbnail sequence, comprising:

a video-receiving module for receiving video source data;

a decoding module for decoding the video source data to obtain video data;

5 a video-extracting module for extracting a key frame from the video data according to a character-image extraction guide; and

a character-thumbnail-sequence-generating module for generating a character thumbnail sequence according to the extracted key frame.

2. The system according to claim 1, further comprising:

10 an image-processing module for image-processing the extracted key frame after the key frame is extracted.

3. The system according to claim 1, further comprising:

an extraction-guide-selecting module for receiving a command from a user to select the character-image extraction guide.

15 4. The system according to claim 1, wherein the character-image extraction guide comprises a face-detection-analyzing algorithm by which image data with face features in the video data are analyzed, the video-extracting module extracts the key frame from the image data according to the face-detection-analyzing algorithm.

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5. The system according to claim 4, wherein the video-extracting module extracts the image data with the same face features as the key frame according to the face-detection-analyzing algorithm.

6. The system according to claim 5, wherein the character thumbnail sequence is a thumbnail sequence of a specific character.

7. The system according to claim 6, further generating album video data of the specific character according to the thumbnail sequence of the specific character.

8. The system according to claim 4, wherein the video-extracting module extracts the image data with different face features as the key frame according to the face-detection-analyzing algorithm.

9. The system according to claim 4, wherein the character-image extraction guide further comprises an audio-analyzing algorithm by which audio data in the video data are analyzed, the video-extracting module screens the image data corresponding to the audio data with human voices according to the audio-analyzing algorithm, and then extracts the key frame from the image data according to the face-detection-analyzing algorithm.

10. The system according to claim 4, wherein the character-image extraction guide further comprises a shot-shift-analyzing algorithm by which shot shifts of the image data in the video data are analyzed, the video-extracting module screens the image data according to the shot-shift-analyzing algorithm, and then extracts

the key frame from the image data according to the face-detection-analyzing algorithm.

11. A method for generating a character thumbnail sequence, comprising:

a video-receiving step for receiving video data;

5 a decoding step for decoding the video source data to obtain video data;

a video extraction step for extracting a key frame from the video data according to a character-image extraction guide; and

a thumbnail-sequence-generating step for generating a thumbnail sequence according to the extracted key frame.

10 12. The method according to claim 11, further comprising:

an image-processing step for image-processing the extracted key frame.

13. The method according to claim 11, further comprising:

an extraction-guide-selecting step for receiving a command from a user to select the character-image extraction guide.

15 14. The method according to claim 11, wherein the character-image extraction guide comprises a face-detection-analyzing algorithm by which image data with face features in the video data are analyzed, the video extraction step is performed for extracting the key frame from the image data according to the face-detection-analyzing algorithm.

15. The method according to claim 14, wherein the video-extracting step is performed for extracting the image data with the same face features as the key frame according to the face-detection-analyzing algorithm.

16. The method according to claim 15, wherein the character thumbnail  
5 sequence is a thumbnail sequence of a specific character.

17. The method according to claim 16, further generating album video data of the specific character according to the thumbnail sequence of the specific character.

18. The method according to claim 14, wherein the video-extracting step is  
10 performed for extracting the image data with different face features as the key frame according to the face-detection-analyzing algorithm.

19. The method according to claim 14, wherein the character-image  
extraction guide further comprises an audio-analyzing algorithm by which audio  
data in the video data are analyzed, the video-extracting module screens the image  
15 data corresponding to the audio data with human voices according to the  
audio-analyzing algorithm, and then extracts the key frame from the image data  
according to the face-detection-analyzing algorithm.

20. The method according to claim 14, wherein the character-image  
extraction guide further comprises a shot-shift-analyzing algorithm by which shot  
20 shifts of the image data in the video data are analyzed, the video-extracting step is  
performed for screening the image data according to the shot-shift-analyzing

algorithm, and then to extract the key frame from the image data according to the face-detection-analyzing algorithm.

21. A recording medium on which is recorded a program to enable a computer to perform a method for generating a character thumbnail sequence, the method for generating the character thumbnail sequence comprising:

a video-receiving step for receiving video data;

a decoding step for decoding the video source data to obtain video data;

a video extraction step for extracting a key frame from the video data according to a character-image extraction guide; and

a character-thumbnail-sequence-generating step for generating a character thumbnail sequence according to the extracted key frame.

22. The recording medium according to claim 21, wherein the method further comprises:

an image-processing step for image-processing the extracted key frame.

23. The recording medium according to claim 21, wherein the method further comprises:

an extraction-guide-selecting step for receiving a command from a user to select the character-image extraction guide.

24. The recording medium according to claim 21, wherein the

character-image extraction guide comprises a face-detection-analyzing algorithm by which image data with face features in the video data are analyzed, the video extraction step is performed for extracting the key frame from the image data according to the face-detection-analyzing algorithm.

5        25. The recording medium according to claim 24, wherein the video-extracting step is performed for extracting the image data with the same face features as the key frame according to the face-detection-analyzing algorithm.

26. The recording medium according to claim 25, wherein the character  
10    thumbnail sequence is a thumbnail sequence of a specific character.

27. The recording medium according to claim 26, wherein the method further generating album video data of the specific character according to the thumbnail sequence of the specific character.

28. The recording medium according to claim 24, wherein the  
15    video-extracting step is performed for extracting the image data with different face features as the key frame according to the face-detection-analyzing algorithm.

29. The recording medium according to claim 24, wherein the character-image extraction guide further comprises an audio-analyzing algorithm  
20    by which audio data in the video data are analyzed, the video-extracting module screens the image data corresponding to the audio data with human voices

according to the audio-analyzing algorithm, and then extracts the key frame from the image data according to the face-detection-analyzing algorithm.

30. The recording medium according to claim 24, wherein the character-image extraction guide further comprises a shot-shift-analyzing  
5 algorithm by which shot shifts of the image data in the video data are analyzed, the video-extracting step is performed for screening the image data according to the shot-shift-analyzing algorithm, and then for extracting the key frame from the image data according to the face-detection-analyzing algorithm.